What is claimed is:

1. A cardiac apparatus, comprising:

a covering including a first portion and a second portion, said covering being configured to at least partially encircle a heart with said first portion of said covering adjacent to said second portion of said covering; and

an electroactive polymer actuator including a first end and a second end, said first end of said electroactive polymer actuator being coupled to said first portion of said covering, said second end of said electroactive polymer actuator being coupled to said second portion of said covering, said second end of said electroactive polymer actuator being oriented such that, upon actuation of said electroactive polymer actuator, said second end of said electroactive polymer actuator extends away from said first end of said electroactive polymer actuator to move said second portion of said covering towards said first portion of said covering.

2. The cardiac apparatus of claim 1, wherein said electroactive polymer actuator includes a dielectric electrostrictive electroactive polymer.

3. The cardiac apparatus of claim 1, further comprising:

a coupling member including a first end and a second end, said first end of said coupling member being coupled to said second end of said electroactive polymer actuator, said second end of said coupling member being coupled to said second portion of said covering.

4. The cardiac apparatus of claim 3, wherein said electroactive polymer actuator is a multi-layered electroactive polymer actuator.

5. The cardiac apparatus of claim 4, wherein said multi-layered electroactive polymer actuator defines an interior cavity, said coupling member extending through said interior cavity such that said first end of said coupling member is coupled to said second end of said multi-layered electroactive polymer actuator within said interior cavity.

6. The cardiac apparatus of claim 1, further comprising:

a releasable latch member coupled to said first portion of said covering and said second portion of said covering, said releasable latch member being configured to retain said first portion of said covering at a desired spacing with respect to said second portion of said covering.

7. The cardiac apparatus of claim 6, further comprising:

a controller electrically coupled to said electroactive polymer actuator, said controller being configured to actuate said electroactive polymer actuator to allow gradual reshaping of said heart.

8. The cardiac apparatus of claim 1, further comprising:

a sensor configured to detect a cardiac cycle of said heart; and

a controller electrically coupled to said sensor and to said electroactive polymer actuator, said controller being configured to actuate said electroactive polymer actuator based on said cardiac cycle.

9. The cardiac apparatus of claim 1, wherein said electroactive polymer actuator is a first electroactive polymer actuator, the cardiac apparatus further comprising a second electroactive polymer actuator including a first end and a second end, said first end of said second electroactive polymer actuator being coupled to said first portion of said covering, said second end of said second electroactive polymer actuator being coupled to said second portion of said covering, said second end of said second electroactive polymer actuator being oriented such that, upon actuation of said second electroactive polymer actuator, said second end of said second electroactive polymer actuator extends away from said first end of said second electroactive polymer actuator to move said second portion of said covering towards said first portion of said covering.

10. The cardiac apparatus of claim 9, further comprising:

a controller electrically coupled to said first electroactive polymer actuator and to said second electroactive polymer actuator, said controller being configured to selectively actuate one of said first electroactive polymer actuator and said second electroactive polymer actuator.

11. The cardiac apparatus of claim 9, further comprising:

a controller electrically coupled to said first electroactive polymer actuator and to said second electroactive polymer actuator, said controller being configured to actuate said first electroactive polymer actuator at a first actuation level and said second electroactive polymer actuator at a second actuation level that is different from said first actuation level.

12. A cardiac apparatus, comprising:

a covering including a first portion and a second portion spaced apart from said first portion, said covering having a size to at least partially surround a heart; and

a size adjustment mechanism coupled to said covering and being configured to adjust said size of said covering, said size adjustment mechanism including

a multi-layered electroactive polymer actuator including a first end and an opposite, second end, said first end of said multi-layered electroactive polymer actuator being coupled to said first portion of said covering, and

a coupling member including a first end and an opposite, second end, said first end of said coupling member being coupled to said second end of said multi-layered electroactive polymer actuator, said second end of said coupling member being coupled to said second portion of said covering.

13. The cardiac apparatus of claim 12, wherein said multi-layered electroactive polymer actuator includes a dielectric electrostrictive electroactive polymer.

14. The cardiac apparatus of claim 12, wherein said second end of said multi-layered electroactive polymer actuator is oriented such that, upon actuation of said multi-layered electroactive polymer actuator, said second end of said multi-layered electroactive polymer actuator extends away from said first end of said multi-layered electroactive

polymer actuator to move said second portion of said covering towards said first portion of said covering.

15. The cardiac apparatus of claim 12, wherein said multi-layered electroactive polymer actuator defines an interior cavity, said coupling member extending through said interior cavity such that said first end of said coupling member is coupled to said second end of said multi-layered electroactive polymer actuator within said interior cavity.

16. The cardiac apparatus of claim 12, wherein said size adjustment mechanism further includes a releasable latch member coupled to said first portion of said covering and said second portion of said covering, said releasable latch member being configured to retain said first portion of said covering at a desired spacing with respect to said second portion of said covering.

17. The cardiac apparatus of claim 16, further comprising:

a controller electrically coupled to said multi-layered electroactive polymer actuator, said controller being configured to actuate said multi-layered electroactive polymer actuator to allow gradual reshaping of said heart.

18. The cardiac apparatus of claim 12, further comprising:

a sensor configured to detect a cardiac cycle of said heart; and

a controller electrically coupled to said sensor and to said multi-layered electroactive polymer actuator, said controller being configured to actuate said multi-layered electroactive polymer actuator based on said cardiac cycle.

19. A cardiac apparatus, comprising:

a covering configured to at least partially surround a heart; and

a size adjustment mechanism coupled to said covering, said size adjustment mechanism including an electroactive polymer actuator configured to expand upon actuation to compress said heart.

20. The cardiac apparatus of claim 19, wherein said electroactive polymer actuator includes a dielectric electrostrictive electroactive polymer.

21. The cardiac apparatus of claim 19, wherein said covering includes a frame including a first support member and a second support member spaced apart from said first support member, said electroactive polymer actuator being formed as a film extending between said first support member and said second support member and being configured to expand inwardly upon actuation to compress said heart.

22. The cardiac apparatus of claim 19, wherein said covering includes a first portion and a second portion, said covering being configured to at least partially encircle said heart with said first portion of said covering adjacent to said second portion of said covering, said electroactive polymer actuator including a first end and a second end, said first end of said electroactive polymer actuator being coupled to said first portion of said covering, said second end of said electroactive polymer actuator being coupled to said second portion of said covering, said second end of said electroactive polymer actuator being oriented such that, upon actuation of said electroactive polymer actuator, said second end of said electroactive polymer actuator extends away from said first end of said electroactive polymer actuator to move said second portion of said covering towards said first portion of said covering.

23. The cardiac apparatus of claim 22, wherein said size adjustment mechanism further includes a coupling member including a first end and a second end, said first end of said coupling member being coupled to said second end of said electroactive polymer actuator, said second end of said coupling member being coupled to said second portion of said covering.

24. The cardiac apparatus of claim 22, wherein said size adjustment mechanism further includes a releasable latch member coupled to said first portion of said covering and said second portion of said covering, said releasable latch member being configured to retain

said first portion of said covering at a desired spacing with respect to said second portion of said covering.

25. The cardiac apparatus of claim 24, further comprising:

a controller electrically coupled to said electroactive polymer actuator, said controller being configured to actuate said electroactive polymer actuator to allow gradual reshaping of said heart.

26. The cardiac apparatus of claim 19, further comprising:

a sensor configured to detect a cardiac cycle of said heart; and

a controller electrically coupled to said sensor and to said electroactive polymer actuator, said controller being configured to actuate said electroactive polymer actuator based on said cardiac cycle.